NORTHERN FOREST EXPERIMENT STATION
JUNEAU, ALASKA
U. S. DEPARTMENT OF AGRICULTURE

U. S. FOREST SERVICE

RESEARCH NOTE NOR-11

INTERMOUNTAIN STATION
Central Reference File
No. 0.23

October 1965

AN AERIAL PHOTO SCALE-PROTRACTOR

- 1: 8,500 to 1: 3,500 Scales -

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Aerial photography, flown at a contract scale of 1: 5,000, was used to great advantage in the forest inventory of interior Alaska. 1/ 3/ 4/ A photo scale-protractor was needed to effectively locate ground plots from these photos. Aerial photo scale-protractors previously developed by Moessner 2/ were designed for smaller scale photography, up to 1: 7,000 scale.

Using Moessner's photo scale-protractor as a model, a similar tool was designed for use with aerial photos having scales from 1: 8,500 to 1: 3,500. This scale-protractor is useful to determine (a) approximate photo scale, (b) ground distances in chains and ground azimuths, and (c) 1-acre areas.

1/ Haack, Paul M. Aerial photo volume tables for interior Alaska tree species. U. S. Forest Serv. Res. Note NOR-3, 8 pp., Northern Forest Expt. Sta., Juneau, Alaska. 1963.

2/ Moessner, Karl E. An aerial photo scale-protractor. U. S. Forest Serv., Station Note 74, Central States Forest Expt. Sta., Columbus, Ohio. 1953.

3/ Wilson, Richard C. Surveys applicable to extensive forest areas in North America. Survey design for interior Alaska. Fifth World Forestry Cong. Proc. 5(1) 260-262. 1962.

4/ U. S. Forest Service. Annual Report of the Northern Forest Expt. Sta., pp. 10-14. 1962.

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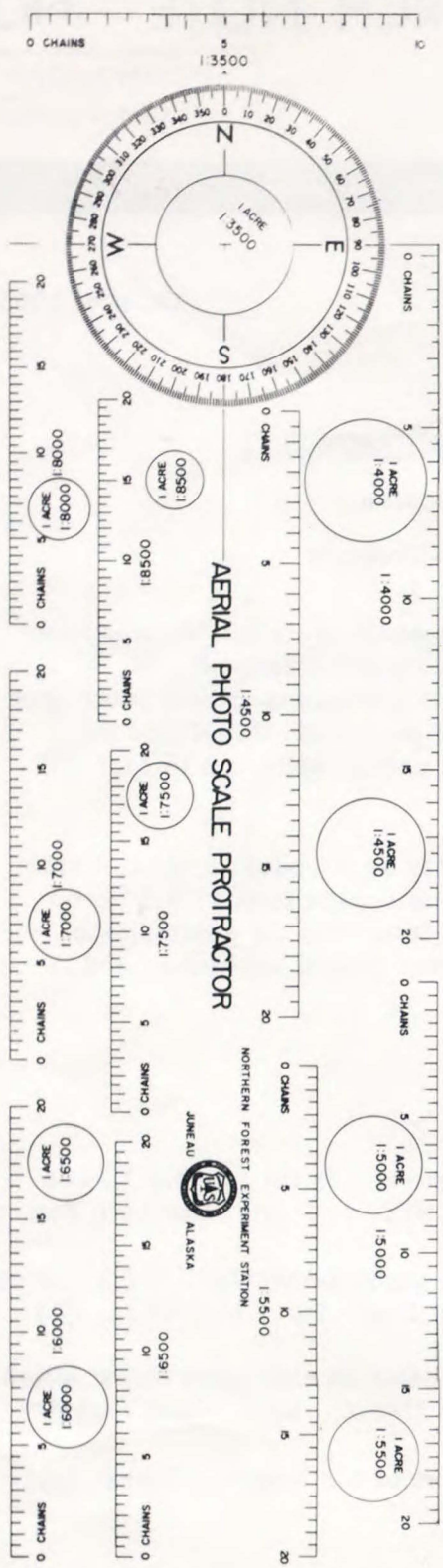

Figure 1.--The aerial photo scale-protractor.

A preliminary model, field tested during 1961 and 1962, worked effectively. Slight modifications suggested by the field crews were made in the final model illustrated here.

This photo scale-protractor printed on heavy transparent film, and instructions for its use, may be obtained by writing to the Northern Forest Experiment Station, 210 Admiral Way, Juneau, Alaska 99801.

GPO 989-387